Beta Test Plan Instructions

An annotated outline for a full beta test plan document. Beta testing refers to testing of a new product, system or service at a customer, prior to release of the item for sale or normal customer use.

Beta testing is often critical for exercising the product, service, or system in a way that cannot be duplicated in the "lab"; and getting customer and end user reaction to the functions and features. Beta should hopefully not uncover major system issues, but it is important validation that the item will work properly/be usable/and meet customer requirements.

The test plan is important because done well, it includes sections for detailed planning elements that are often overlooked and can drastically affect both the scope and the effectiveness of the tests.

Create the first draft of this document well ahead of when the beta testing should start. A well-designed beta test will require commitment from appropriate customers, planning for availability of personnel and equipment, etc.

Understand the purpose of the plan for your project to time its creation properly:

- When do you *know* enough to start the beta plan? – i.e., what kind of beta customer(s) you want; what roles you'll need for that kind of testing, etc.

- When is earliest the beta plan might do some good? – i.e., when can someone else first put the information to use, for instance, to plan for equipment purchases or start talking to potential beta customers with enough lead time?

- When is *too* late to start? – i.e., if you started that late, there would be no slack time for unforeseen issues**.**

Consider these questions:

- What was the purpose of the beta test?

- How should the beta test plan document have supported that purpose?

- What should have been the purpose of the beta plan itself?

- Who should have been its audience?

- When should it have been written?

- What additional information should the beta test plan have contained?

Beta Test Plan Outline

1. Introduction

    ✓ Revision History. Record revisions to the document.

    ✓ Purpose and Scope. State the purpose and scope of the document.

    ✓ List of Reference Documents   List all reference documents, such as Alpha Test Plan, with completion criteria.

2. Beta Test Scope, Strategy and Timeline

    Define the scope and strategy for testing the system at one or more customers.

    ✓ Beta Test Customers, Environment and Scope: Summarize the customer(s) at which the beta testing will take place, the environment (production, test bed, etc.) at each customer, and the type and purpose of the testing that will occur. (This is meant to be a high level summary that someone could read and understand within one paragraph per customer what testing will be done. More detail will be covered below.)

3. Testing Criteria

    ✓ Beta Ship Criteria. Specify the criteria which must be met before the system will be sent to the customer for beta testing, e.g., Alpha tests completed successfully, any open issues reviewed with customer. Any regulatory approvals needed before beta? User manual draft ready? Operator training accomplished?

    ✓ Beta Install and Criteria to Begin Testing. Summarize the installation work to be done and what conditions must be met before the system is moved into operation at the customer.

4. Testing Scope

    ✓ Features to be Tested. List or put in table form the functionality to be tested at the beta customer.

    ✓ Features Not to be Tested. Specifically state what will NOT be tested, if anything.

    ✓ Other Items to be Evaluated. List any other aspects of the system or product that will be evaluated by the customer, i.e., operator interface, user manual usefulness, etc.

    ✓ Safety-Related Testing (if applicable).

5. Overall Test Strategy and Timeline: Summarize the testing strategy from a timeline perspective in either graphical or table form. For instance:

> Week 1: Installation, bring-up, basic operator training.

> Week 2: Verify basic functionality and gain customer acceptance.

> Week 3: Move to live operation.

> Week 4: First assessment of results with customer.

> Week 5: Etc.

6. Assumptions   List any critical assumptions.

7. Test Descriptions

For each major set of tests to be run (such as major functional groups, performance, stress), describe the types of tests to be run.

8. Functional Tests

Verification that the system meets its functional/feature requirements.

9. Configuration Tests

Testing to assure that all functions work under all combinations (hardware configurations, device assignment combinations, etc.).

10. Load and Performance Tests

Testing to confirm that performance objectives are satisfied. Includes accuracy testing.

11. Stress Tests

Testing which attempts to break the system by stressing all of its resources.

12. Recovery and Error Handling Tests

Testing to confirm that the system recovers from hardware and/or software malfunctions without losing data or control, or that it follows the error handling requirements defined for the product.

13. Specific Safety-Related Tests

Any tests specific to verification of safety-significant software.

14. Tools and Test Equipment Required

Identify all tools and test equipment required and who is expected to provide them.

15. Roles and Responsibilities

Identify all personnel to be involved directly in the testing or in critical supporting roles. Define the responsibilities assigned to each.

Who	Co.	Role	Responsibility	Contact #	Back-Up Contact

16. Problem Recording, Issues Management and Escalation, Rework and Resolution

Define the mechanism to be used for problem recording and resolution, escalation of issues if necessary, and recording of associated changes to the system. Define the process for rework, review and retest of any element which needs modification. This process must include sufficient retest to verify that any modifications have not impacted other functions already tested.

- How issues will be recorded and who records them.

- How will/who will review the issues each day and decide what gets worked on first.

- What issues are serious enough that they should be raised to management immediately, and what is the escalation procedure for them?

- How enhancement requests will be logged and handled.

- How changes made on the system at the customer will be documented there and brought back to the company for official incorporation into the product.

- Once any rework is completed, who will agree on how to test the fix before putting the machine back into production, who will agree that the issue is corrected or not, and document the resolution on the issues log?

17. Exit Criteria

Define the criteria determining with the customer that the system is performing adequately for their use.

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Administrative Information

Revision	Author	Date	Sections Affected	Change Summary
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